COMMONWEALTH OF MASSACHUSETTS

Executive Office of Housing and Economic Development

OFFICE OF PERFORMANCE MANAGEMENT & OVERSIGHT
Massachusetts Clean Energy Center

FISCAL 2016 ANNUAL PLAN

INTRODUCTION

The Massachusetts Clean Energy Center (MassCEC) Fiscal 2016 Annual Plan complies with the requirements of the Office of Performance Management Oversight created by Chapter 240 of the Acts of 2010 – An Act Relative to Economic Development Reorganization. It includes goals set for the year and the performance measurements by which to evaluate goals, programs, and initiatives.

AGENCY OVERVIEW

The Massachusetts Clean Energy Center (MassCEC) is dedicated to accelerating the success of clean energy technologies, companies and projects in Massachusetts—while creating high-quality jobs and long-term economic growth for the people of Massachusetts.

MassCEC provides early-stage and growth investments to startup companies, funds renewable energy rebates for residents and businesses and supports the development of a local <u>clean energy workforce</u>. Since its inception in 2009, MassCEC has helped <u>clean energy companies</u> grow, supported municipal clean energy projects and invested in residential and commercial renewable energy installations creating a robust marketplace for innovative clean technology companies and service providers.

FISCAL YEAR 2016 ANNUAL PLAN

GOAL: Increase renewable energy adoption while driving down the cost of renewable energy.

MassCEC's Renewable Energy Generation programs are structured to leverage the maximum amount private investment per ratepayer dollar spent, to reduce and eliminate state-funded incentives over time and to work closely with the industry to achieve economies of scale and accelerate cost reductions.

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Strategy	Measurements	
Increase residential adoption, reduce lifetime energy costs, and leverage private investment in renewable heating & cooling technologies, including air-source heat pumps, ground-source heat pumps and central biomass heating systems	 Number of systems installed Lifetime energy costs for systems installed Private investment leveraged per dollar awarded by MassCEC 	
Shift from a grant-based incentive program to a low- interest loan program to connect homeowners who want to install solar electric systems with lenders to help finance the projects, expanding borrowing options through encouraging lower interest rate loans, and	 Number of loans enabled Megawatts (MW) of installed capacity enabled Installed capacity at moderate income households as a percentage of overall MW enabled Private capital leveraged 	

encouraging loans to borrowers with moderate income or lower credit scores.	
Increase residential and commercial adoption of, reduce lifetime energy costs using, and leverage private investment in solar hot water systems	 Number of systems installed Lifetime energy costs for systems installed Private investment leveraged per dollar awarded by MassCEC
Increase the processing capacity for organic materials and the generation of energy from facilities using this material primarily via anaerobic digestion	 Number of projects in pipeline Megawatts (MW) associated with construction awards Organics processing capacity associated with construction awards
Cost-effectively increase the generation of electricity by Massachusetts RPS-qualified hydroelectric facilities	 Number of projects in late-stage pipeline Number of projects in early-stage pipeline Annual generation (kWh) from hydropower
Advance the development of appropriately-sited wind projects, and increase wind sector economic activity	 Number of projects entering the pipeline or advancing to next stage Number of new information projects supported Number of research projects supported
Provide permitting, planning, and transmission analysis to support the responsible and expedited development of offshore wind in the federal waters south of Martha's Vineyard	 Number of new or expanded projects supported Number of awards for research projects Number of avian surveys completed

GOAL: Massachusetts continuing to lead in clean energy.

Massachusetts is home to a global-leading cleantech sector that is launching some of world's top clean energy companies. Our unique concentration of R&D, innovation and start-up company excellence has become a magnet for outside investment in our state

Strategy	Measurements
Provide MA-based incubators that serve clean energy start-up companies with operational and management expenses to enable them to provide support to cleantech start-up companies, promoting investment and job growth	 Number of cleantech companies served by incubators, including graduates Number of employees at these cleantech companies Total funding raised by these companies

Assist Massachusetts cleantech companies in advancing Number of employees at supported companies Total funding raised by these companies in current their technologies to the commercialization stage and and future financing rounds beyond through direct equity and venture debt Valuation and returns (\$) as multiple of investment investments, generating both job growth and a financial return Total revenues generated by supported companies Provide federally-mandated cost share to MA-based External dollars leveraged Percentage of total awarded ARPA-E dollars to MA ARPA-E awardees to advance cutting-edge technology, entities enhance the competitiveness of MA-based ARPA-E Number of projects funded applications to increase capture of federal funding, and leverage the deep technical expertise of ARPA-E Provide wind industry with efficient facility/technology to Testing revenues generated by Wind Technology Testing Center (WTTC) test utility scale wind turbine blades to validate and Number of industry blades tested improve reliability and support introduction of new Maintain operational excellence through technology into production, while maintaining positive internationally-recognized assessment and operating income accreditation certification

GOAL: Ensure a trained workforce for a rapidly growing industry.

In coordination with the newly-established Workforce Skills Cabinet, MassCEC delivers workforce training programs that are tailored to meet the needs of clean energy employers across the entire state, while improving workforce skills, job readiness and vocational and educational opportunities for Massachusetts residents.

Provide Massachusetts clean energy businesses with a talented pool of young professionals and introduce clean energy career experiences to people entering the workforce, through on-the-job training programs • Number of students who are placed at host employers • Number of companies who host an intern • Percentage of female students placed at host employers

GOAL: Advance innovative solutions that will lead to energy security and a safe, reliable and resilient energy infrastructure.

MassCEC supports market development for emerging technologies and business models, including microgrids and energy storage. This support complements the Commonwealth's efforts to modernize the electric grid, deliver energy more efficiently, and accommodate increasingly distributed generation.

Strategy	Measurements
Provide grants for demonstration projects to promote the commercialization of new technologies and the creation of business partnerships while leveraging private funding	 Increase of Technology Readiness Level (TRL) Private funding leveraged per dollar awarded by MassCEC Number of strategic partners engaged
Provide grants for university teams and early stage start- up companies to fund targeted proof-of-concept projects	 External capital leveraged in follow-on financings Number of applications received Number of awards disbursed Number of inventions disclosed, patents awarded or patents filed

GOAL: Strengthen public confidence in the use of ratepayer dollars.

As a quasi-public agency and authority of the Commonwealth, MassCEC is subject to levels of financial review and oversight that apply to both public and private entities. MassCEC has performed extremely well in each outside review conducted to date. MassCEC has implemented rigorous changes to increase financial and programmatic transparency. Some of these efforts have been in place since the agency was created, but many have been implemented since 2012 at the direction of current management, with the specific goal to make MassCEC finances more accessible to the public.

Strategy	Measurements
Annual Independent Fiscal Audit – MassCEC engages in an independent audit of its financial statements every year, which is conducted by an independent accounting firm. The results and audited financial statements are reported to the MassCEC Audit Committee and full Board of Directors each year.	 Independent fiscal audit presented annually to the MassCEC Board of Directors and Audit Committee at public meetings. Independent fiscal audit submitted annually to the MA State Legislature per its enabling statute.
Continued partnership with A&F on Open Checkbook	Data submitted monthly: www.mass.gov/opencheckbook
Budget and Program Performance Online – MassCEC has posted extensive financial information on its own	Metric and performance scorecards for key programs.Enhanced details on spending.

website. In FY16, management will work toward posting
additional information.
Verification of Renewable Energy Production – Tracking

and Verification of Renewable Energy Production – Tracking and Verification of Renewable Energy Production – MassCEC's Production Tracking System (PTS), (1) tracks renewable energy generation supported through MassCEC grants and rebate programs, (2) is the Independent Third Party Verifier for eligible renewable energy production that qualifies for Renewable Energy Certificates (RECs). The PTS provides data quality assurance by ensuring that renewable energy generations are appropriately registered, reported, verified and audited. MassCEC reports quarterly solar energy production to the NEPOOL (New England Power Pool), who then produces Solar-RECs (SRECs and others). NEPOOL is a voluntary association of market participants doing business in the six-state New England region.

- Quarterly production data reported to NEPOOL.
- Annual independent audit of SREC systems completed.

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